AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original) A codec, comprising:

an encoder that includes a first plurality of variable parameters that are used to specify different settings at which a coding algorithm applied to incoming video data operates; and

a decoder that includes a second plurality of variable parameters that are used to specify different settings at which a decoding algorithm applied to outgoing video data operates;

wherein the codec is configured such that, during operation, at least one of the coding algorithm and decoding algorithm is able to dynamically change its operating setting according to available computational resources in response to actual complexity measurements performed at run-time.

2. (Original) A codec as recited in claim 1, wherein the first plurality of variable parameters that are used to specify the different settings at which the coding algorithm operates include

motion-search window,

motion-search algorithm,

motion-search sum-of-absolute-differences measurement sub-sampling factor, and motion-search half-pel refinement none/x-only/x-and-y.

3. (Original) A codec as recited in claim 1, wherein the second plurality of variable parameters that are used to specify the different settings at which the decoding algorithm operates include

IDCT,

chroma-skipping, and

frame-display skipping.

4. (Withdrawn)   A video conferencing system, comprising:

a plurality of codecs configured to share the system's resources, each codec comprising

an encoder that includes an associated set of parameters that are used to define different settings at which an associated coding algorithm applied to incoming video data operates, and

a decoder that includes an associated set of parameters that are used to define different settings at which an associated decoding algorithm applied to outgoing video data operates;

wherein each of the codecs is configured such that its algorithms in use dynamically adapt their operating settings during operation according to available computational resources in response to actual complexity measurements performed at run-time.

5. (Original) A device for processing a video stream, comprising:

a plurality of variable parameters that are used to specify different settings at which an algorithm applied to the video stream operates;

wherein the device is configured such that, during operation, the algorithm is able to dynamically change its operating setting according to available computational resources in response to actual complexity measurements performed at run-time.

6. (Original) A device as recited in claim 5, wherein the device comprises an encoder, and the algorithm comprises a coding algorithm.

7. (Original) A device as recited in claim 6, wherein the plurality of variable parameters that are used to specify the different settings at which the coding algorithm operates include

motion-search window,

motion-search algorithm,

motion-search sum-of-absolute-differences measurement sub-sampling factor, and

motion-search half-pel refinement none/x-only/x-and-y.

8. (Original) A device as recited in claim 5, wherein the device comprises a decoder, and the algorithm comprises a decoding algorithm.

9. (Original) A device as recited in claim 8, wherein the plurality of variable parameters that are used to specify the different settings at which the decoding algorithm operates include

IDCT,

chroma-skipping, and

frame-display skipping.

10. (Original)   A method for processing a video stream, comprising the steps of:

measuring the real-time used by an algorithm for a previous frame;

averaging the measured real-time used for the previous frame with a previously measured real-time for the algorithm to obtain a weighted average time value;

comparing the weighted average time value with a target range; and

controlling a setting of the algorithm by:

downgrading the algorithm setting, if the weighted average time value is greater than an upper bound of the target range, and

upgrading the algorithm setting, if the weighted average time value is less than a lower bound of the target range and has been so over a predetermined number of frames.

11. (Original)   A method as recited in claim 10, wherein the controlling a setting of the algorithm further comprises:

periodically upgrading the algorithm setting, if the weighted average time value is between the lower bound of the target range and a target value within the target range.

12. (Original)   A method as recited in claim 11, wherein the step of upgrading the algorithm periodically is also carried out, if the weighted average time value is less than the lower bound of the target range but has not been so for at least the predetermined number of frames.

13. (Original)   A machine-readable medium embodying a program of instructions for directing a device to process a video stream, the program of instructions comprising:

instructions for measuring the real-time used by an algorithm for a previous frame;

instructions for averaging the measured real-time used for the previous frame with a previously measured real-time for the algorithm to obtain a weighted average time value;

instructions for comparing the weighted average time value with a target range; and

instructions for controlling a setting of the algorithm including:

instructions for downgrading the algorithm setting, if the weighted average time value is greater than an upper bound of the target range, and

instructions for upgrading the algorithm setting, if the weighted average time value is less than a lower bound of the target range and has been so over a predetermined number of frames.

14. (Original)   A machine-readable medium as recited in claim 13, wherein the instructions for controlling a setting of the algorithm further comprises:

instructions for periodically upgrading the algorithm setting, if the weighted average time value is between the lower bound of the target range and a target value within the target range.

15. (Original)   A machine-readable medium as recited in claim 14, wherein the instructions for upgrading the algorithm periodically is also executed, if the weighted average time value is less than the lower bound of the target range but has not been so for at least the predetermined number of frames.

16. (Previously Presented) A codec as recited in claim 1, wherein said coding algorithm is a single coding algorithm.

17. (Previously Presented) A codec as recited in claim 1, wherein said decoding algorithm is a single decoding algorithm.